Washington Park Arboretum

BULLETIN

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for the Washington Park Arboretum

Washington Park Arboretum

The Arboretum is a 230-acre living museum displaying internationally renowned collections of oaks, conifers, camellias, Japanese maples, hollies and a profusion of woody plants from the Pacific Northwest and around the world. Aesthetic enjoyment gracefully co-exists with science in this spectacular urban green space on the shores of Lake Washington. Visitors come to learn, explore, relax or reflect in Seattle's largest public garden.

The Washington Park Arboretum is managed cooperatively by the University of Washington and Seattle Parks and Recreation; the Arboretum Foundation is its major support organization.

Graham Visitors Center

Open 10 AM—4 PM daily;
holidays, NOON—4 PM.
Closed Thanksgiving and the Friday after,
Christmas and New Year's Day.
The Arboretum is accessible by Metro bus #43 from downtown Seattle and the University of Washington campus

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The Arboretum Foundation is a nonprofit organization established in 1935 to ensure stewardship for the Washington Park Arboretum and to provide horticultural leadership for the region. The Foundation provides funding, volunteer services, membership programs and public information in support of the Arboretum, its plant collections and programs. Volunteers operate the gift shop, conduct major fundraising events, and further their gardening knowledge through study groups and hands-on work in the greenhouse or grounds.

2300 Arboretum Drive East, Seattle, WA 98112
206-325-4510 voice / 206-325-8893 fax
gvc@arboretumfoundation.org
www.arboretumfoundation.org
Office hours: 8:30 AM—4:30 PM weekdays
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206-684-4556 voice / 206-684-4304 fax
Ken Bounds, Superintendent

Washington Park Arboretum Bulletin

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Constance Bollen, Graphic Design

Joy Spurr, Photography
(unless otherwise noted)

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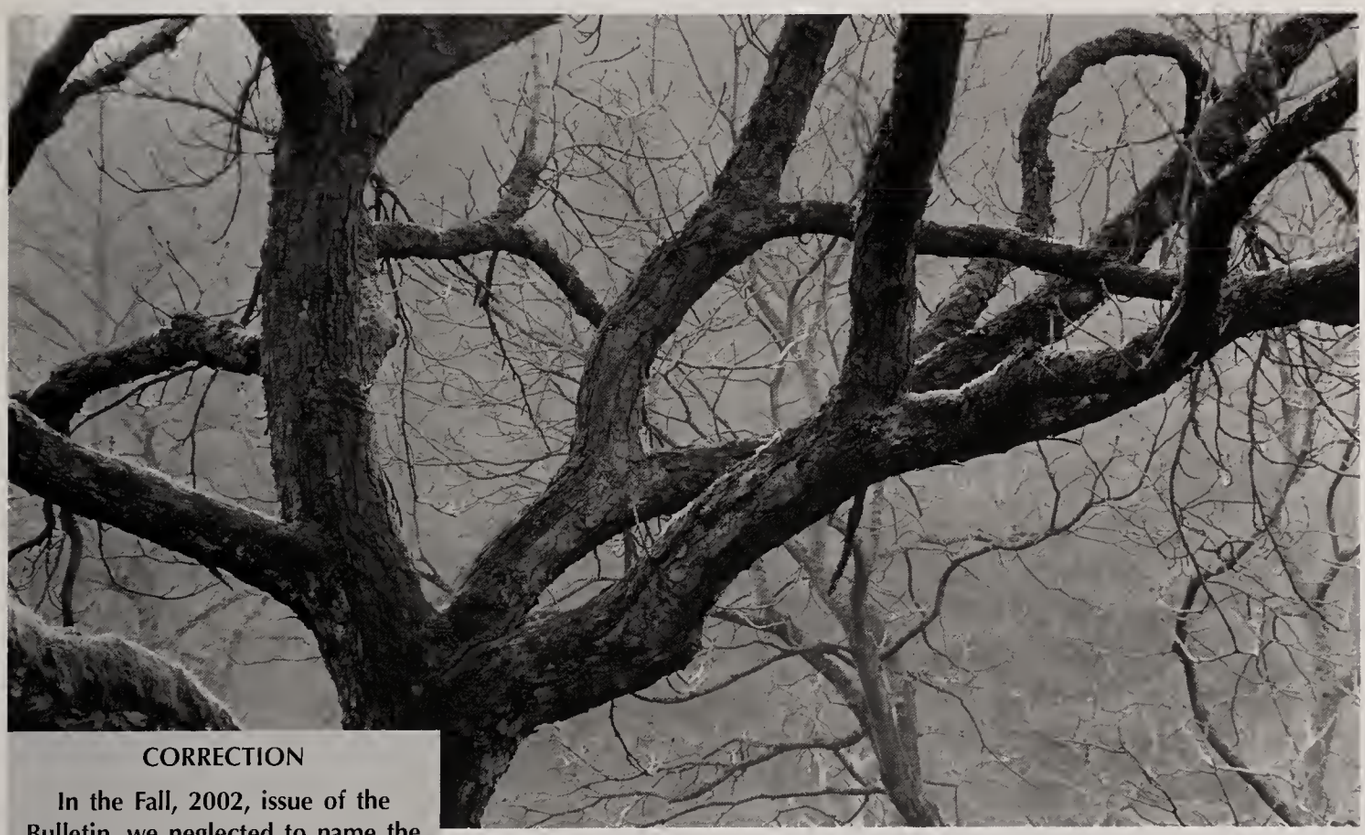


JEFF KREWSON

CORRECTION

In the Fall, 2002, issue of the Bulletin, we neglected to name the photographers whose work illustrated the article "A Well-Kept Secret." The photograph of seeds on page six was taken by Randall Hitchin. The photograph of Randall Hitchin on page 10 was taken by Keith Ferguson.

ABOVE: "Gnarles." Branches against a gray sky are alive with sinuous movement; branch patterns can be just as fascinating as spring bloom or autumn color.

ON THE COVER: This photograph of a blossom of *Hamamelis* x *intermedia* 'Jelena' shows the flower's intricate structure and unusual, coppery orange-peel color. The fall foliage of *H.* x *intermedia* 'Jelena' is equally brilliant.

Let's Celebrate!

In this dark time of the year, in the Pacific Northwest, we find all sorts of reasons to celebrate life and light. This issue of the Bulletin is full of reasons for celebration. The planting of three young trees, *Quercus* x *bushii* 'Seattle Trident,' is, itself, a celebration of the dedication and work of many passionate plantsmen. We would not have these unusual cultivars of *Q.* x *bushii* were it not for the extraordinary sharing of generous horticulturists years ago.

This spirit of passionate plant collecting and generosity also fueled the centuries-old desire to create pineta, an approach to the collection and arrangement of conifers which continues in the Arboretum today. And the desire to share enthusiasm for the most garden-worthy plants and knowledge of how best to care for them sparks our focus in this issue on witch hazels. You can visit these plants throughout the winter in the Arboretum's Joseph A. Witt Winter Garden.

A passion for plants is perhaps best appreciated through the voices of individual gardeners, and many such voices are collected in Richard Mabey's "Flora Britannica," full of stories of plants and people and reviewed in this issue. Two such stories are told here by generous gardeners, whose commitment to the Arboretum deserves continued appreciation—volunteer Jeannine Curry (who died in October 2002) and collections crew member Dean Powell—who, very personally, share here their passion for plants. We celebrate their generosity of spirit!

Finally, in this issue, we bring your first glimpse of the Arboretum's Northwest Flower & Garden Show display garden and its salute to the Seattle's Olmsted legacy. See the garden, and many more, at our Preview Gala on February 18, and look for more articles on Seattle's year-long Olmsted celebration in our Spring 2003 issue.

Deborah Andrews

Deborah Andrews, Executive Director,
Arboretum Foundation

The leaves of *Quercus* x *bushii* turn a rich gold in autumn. They then turn crisp and brown, often remaining on the tree until pushed off by new growth in spring.

With Gratitude

By Dean Powell

ARBORETUM COLLECTIONS CREW

Dean Powell standing by a large specimen of *Pterocarya stenoptera* (Chinese wingnut) which he transplanted from the nursery to the lagoon area next to Duck Bay in the winter of 1976-77.

I joined the University of Washington staff in late 1970. Originally from Missouri, I was born on a family farm (fifth generation), and inherited a love of nature and outdoor life from a long line of farming ancestors. After serving in the Korean War with the U.S. Navy and finishing college at Arizona State University, I decided to go north and explore the greenery of Puget Sound and western Washington.

Arriving in Seattle in autumn, I fell in love at first sight. Several years in the xeric climates of the Southwest made it a great joy to see the abundance of waters: an inland sea, natural lakes, rivers, streams and creeks that flowed year 'round. The magnificent forests, which require mist and rain, were framed with snow-capped mountains. This was the place for my four children and me.

I spent my first five years in Seattle working in Suzzallo library and on the University grounds crew before transferring to the Arboretum. In 1975, Joe Witt and Brian Mulligan interviewed me and became my mentors. Their amazing knowledge of plants was complemented by their patience and politeness. Their non-critical nature led everyone to respect them. During this time Dick Hart was the grounds supervisor. A good mechanic, equipment operator and tree man, Hart was an easy-going person who contributed much in his 35 years at the Arboretum. My fourth mentor was Richard van Klaveren, Arboretum propagator for many years. When he died, I filled in for him.

One of Joe Witt's first loves was the Winter Garden, since named for him. He often talked of his plans for its renovation and enlarge-

ment. He also planned and developed the Himalayan Hillside and the area (formerly known as the Wild Woods) that leads north to the Loderi Valley service road. I planted the trees and shrubs in that area. I also worked with Witt finishing the *Sorbus* section begun by Brian Mulligan. My job titles, assigned by Witt, were Nursery Manager, Planter, and Gardener Lead. Currently, I am Plant Technician with responsibilities for the health care and growing conditions of the collection's plants. A large part of my time is spent on pest management, including monitoring, appropriate spraying and record keeping.

"Winter is my favorite time in the Arboretum: a time of mist and rain, a time of cleansing the air, the earth and everything upon it."

The Arboretum in Winter

Winter is my favorite time in the Arboretum: a time of mist and rain, a time of cleansing the air, the earth and everything upon it. The plants are rejuvenated; they regain strength after the exhaustion of summer. The ground regains moisture, preparing for spring. The weather does not improve with more sun—it just changes. Sun and rain are equally important. And at times, we even have the artful, mystical magic of fog. A cloudy day of blues and grays can be just as uplifting and refreshing as a day of golden sunshine. Like a marvelous melody played on the piano, the spaces of silence between the notes are as important and beautiful as the notes themselves.

So grab an umbrella, come and take a walk in the Arboretum. Plants are not political but perform according to their own idiosyncrasies and the weather. There is beauty in the shadows formed by the rolling land, the hills and glens, streams and ponds. There is variety in the color and pattern of the needles of many conifers. Keep an eye out for Washington natives, for they are as beautiful as the formally collected plants and provide the frame or support for every collection. All around us are our native firs, hemlocks, majestic cedars, the dependable Indian plum, salal, Oregon grape and hazelnut. Woven through the forest vegetation are the dark green fronds of the giant sword fern (*Polystichum munitum*).

Stroll through the Winter Garden, one of my favorite parts of the Arboretum. You will probably find something blossoming, but also notice stem color, branch patterns, leaf shapes, the color of fruit, the texture of bark. Early in the new year, the green spears of many bulbs will be above ground—tulips, daffodils, crocuses and snow drops. You may see an Anna's hummingbird feeding at the bright yellow flowers of *Mahonia* 'Arthur Menzies.' You may see early blooming cherries, rhododendrons, cotoneasters, winter hazel (*Corylopsis* species), camellias, heaths and hellebores, even the lovely, pale yellow, drooping racemes of *Stachyurus praecox* and the slender, creamy catkins of *Garrya elliptica*. And on the wind will be the scent of sweet box (*Sarcococca* species); wintersweet (*Chimonanthus praecox*); and the crowd of colorful witch hazels (*Hamamelis* species).

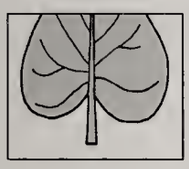
For almost 28 years I have worked in the Arboretum. After all this time, I still have no single favorite plant. But I do have a favorite climate, for weather patterns here produce the greatest array of flowers to be found. It is said, in Ireland there are 40 shades of green. 'Tis wonderful. But here we have 40 shades of green plus 40 shades of blue and gray. So much the more wondrous. There is no better time to appreciate each of them than right now.

Dean Powell has been a valuable part of the Arboretum's collections crew for almost 28 years.

HORT 101

Test your horticultural vocabulary with these terms used in this issue!

CORDATE (kôr´ dāt), adjective

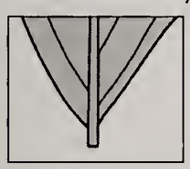


Describing the shape of a leaf base, heart-shaped, with the petiole between the two rounded lobes.

CRYPTOGAM (krip´ tə gam´), noun

A non seed-producing plant with no flowers or cones, rather reproducing by spores, as ferns, mosses, fungi and algae. CRYPTOGAMOUS (krip tog´ə məs) adjective.

CUNEATE (kyo͞o´ nē it, āt´), adjective



Describing the shape of a leaf base, wedge-shaped, narrowly triangular, with the narrow end connected to the petiole.

GLABROUS (glā´ brəs), adjective

Having a smooth surface, without hairs of any kind.

LAMINA (lam´ə nə´), noun

A blade-like or flattened portion of a leaf or petal. LAMINAE (lam´ə nē) noun, pl.

OBOVATE (ob ō´ vāt), adjective

Describing the shape of a leaf, inversely ovate, broader above rather than below the middle.

OVATE (ō´vāt), adjective

Describing the shape of a leaf, with an outline like that of a hen's egg, more or less rounded at both ends and broadest below the middle.

PETIOLE (pet´ ē ōl´), noun

The stalked portion of a leaf. The petiole rotates the leaf, allowing it to track the sun's changing position. It also provides flexibility to the leaf in times of high wind or heavy rain.

PHANEROGAM (făn´ ĕr o găm´), noun

A seed-producing plant, such as a flowering plant or conifer. PHANEROGAMOUS (făn ĕr og´a mus), adjective. PHAENOGAMOUS is an early, no longer used, spelling of Phanerogamous.

SAINT FIACRE

A 7th century Irish monk, St. Fiacre fled to France when his followers became too numerous. Fiacre had the gift of healing and, once in France, miraculously obtained a large garden which became a place of pilgrimage. Among others, he is the patron saint of cab drivers and gardeners and is often depicted carrying a spade.

SAMARA (sam´ər ə, sə mâr´ ə), noun

A one-seeded, winged fruit, such as that of the elm or maple, which is dry (non-fleshy) and does not split open.

SCION (sī´ən), noun

From an early English word meaning offshoot, a scion is a plant part inserted into a rootstock during grafting. The scion may be as large as a small branch or as small as an axillary bud attached to a sliver of bark and wood.

TOMENTUM (tə men´ təm), noun

A covering of densely matted, short, woolly hairs.

XERIC (zēr´ ik), adjective

Of, pertaining to, or adapted to a dry environment.

Quercus x *bushii* 'Seattle Trident'—A New Cultivar of Hybrid Red Oak

By Sally A. Scott and Allen J. Coombes

In the genus *Quercus*, red oaks (subgenus *Quercus*, section *Lobatae*) are confined to the Western hemisphere, with wide distribution from southern Canada, south through the United States, Mexico and Central America, and a single species in Colombia, South America.

Red oaks are notoriously promiscuous, and where two or more species grow together in the wild, it is often possible to find hybrids. In his classic paper on the hybrid oaks of

The prominently three-lobed leaves of *Quercus* x *bushii* 'Seattle Trident,' named by Sir Harold Hillier Gardens and Arboretum for the tree's place of origin and the leaves' trident-like appearance.

North America, E.J. Palmer (1948) listed nearly 50 red oak hybrids, most of natural occurrence. Hybridization in the wild often results in solitary, unusual trees or scattered clusters of intermediate individuals. Hybrids usually occur at the boundaries of habitats where different species with different soil tolerances are found. Therefore, they are most likely to be in areas where the parents meet, normally where one species is abundant and one species is rare. The chance of finding hybrids where both parents are numerous is smaller as there is more chance of a plant being pollinated by one of its own species.

Hybridization in cultivation is more complex, as species that do not occur together naturally are grown in close proximity, usually in small numbers, increasing the probability that any offspring will be of hybrid origin.

Benjamin Franklin Bush

Quercus x *bushii* was named after Benjamin Franklin Bush (1858-1937), a Missouri botanist, ornithologist and plant collector who often collected plants for botanical institutions, including Harvard University. Bush's contribution towards making the flora of Missouri better known was large, and his dedication was unsurpassed. In 1895 a list of woody plants he prepared was published by the State Horticultural Society; it listed 53 woody species native to Jasper County. In 1886 he was acknowledged in the preface of Prof. S. M. Tracy's *Catalogue of the Phaenogamous and Vascular Cryptogamous Plants of Missouri* which listed 1,785 species. B.F. Bush's work *The Flora of Jackson County* (1882) was used as a source of information for the Tracy Catalogue. In 1902 Bush and K. K. Mackenzie published their even more important *Manual of the Flora of Jackson County*.

In 1916, when E. J. Palmer—collector for the Missouri Botanical Garden and the Arnold Arboretum of Harvard University—completed the *Catalogue of the Plants of Jasper County, Missouri*, he wrote in his introduction, thanking Bush:

> *"...whose unflagging interest in the work from its beginning has been one of the chief stimulants to its prosecution; I am under many obligations, both for the determination of plants during successive years when my time and botanical knowledge were both very limited, and for the contribution of literature and specimens for comparison. As the pleasant companion, too, of many botanical excursions I have had the benefit of his unequalled knowledge of plants in the field."*

Quercus x bushii

Q. x *bushii* was named by Charles Sargent (1918) from a specimen collected by Bush near Sapulpa, Creek County, Oklahoma, on September 20, 1895 (Bush, 1328). On November 20 that year B.F. Bush wrote of how he stumbled upon this hybrid:

> *"While collecting along a little rocky branch a mile south-west of Sapulpa, Indian Territory, on September 20th, I was led to observe more closely the Texas Red Oak, Quercus Texana, on account of its occurrence in such large numbers, and while doing this I came upon an Oak plainly different from that species, and which I thought to be a hybrid. After a careful study of it and the surrounding trees, I became satisfied that it was a hybrid between the Black Jack Oak and the Black Oak. It may be briefly described as Q. Marilandica x velutina, n. hyb.: a tall, slender tree, scarcely resembling either Q. Marilandica or Q. velutina in general appearance, but more like the latter; trunk and branches exactly like those of Q. Marilandica, but twigs and branchlets like those of Q. velutina; buds nearly like those of Q. velutina, but larger; leaves broader at the upper end and tapering to*

a narrow, sometimes cordate base, three to five lobed; lobing very various, some like Q. Marilandica and some like Q. velutina, all shortly bristle-tipped; upper surface of leaves as in Q. Marilandica, but lower surface nearly like that in Q. velutina, but somewhat rusty-downy; petioles slender, nearly smooth and averaging about one inch in length; acorns long and slender-pointed, very rusty-downy when young, but nearly smooth when mature, striped with alternating lines of black and yellow, as in Q. Marilandica; cup top-shaped, with a scaly edge, longer than that of either Q. Marilandica or Q. velutina, but approaching the latter more nearly. One tree only, sixty feet in height, with a trunk about fifteen inches in diameter, and growing in a rocky hollow where Q. Texana is abundant, and Q. Marilandica, Q. minor and Q. velutina are common."

Independence, Mo., B. F. Bush

The natural ranges of *Q. marilandica* and *Q. velutina* overlap considerably, and where they occur together, hybrids between them can occasionally be found. When Sargent described *Q.* x *bushii*, hybrids had only been found in Oklahoma, Mississippi, Alabama, Florida and Georgia.

Quercus x *bushii*: Coast to Coast

In October, 1937, Mrs. Thorgrimson sent 21 seeds of *Q.* x *bushii* to Washington Park Arboretum. There are no records at the Arnold Arboretum to throw light on the origin of the tree from which these seeds came, but it was probably one accessioned there in 1931 when it was already about 20 years old. There is fruit with the type specimen of *Q.* x *bushii* at Harvard University Herbaria, so it is likely that Bush collected and distributed seed from the original collection in Oklahoma in 1895, and possible that the Arnold Arboretum tree derived from this collection. In September 1938, Massachusetts had a violent storm which destroyed many plants, and it is assumed that the *Q.* x *bushii* tree at the Arnold Arboretum was lost at that time.

In November 1953, three trees of *Quercus* x *bushii* deriving from the Arnold Arboretum seed were planted at Washington Park Arboretum. The Arboretum's Brian Mulligan and Sir Harold Hillier regularly corresponded about new and exciting plants they had received and often sent each other propagating material. Mulligan first mentioned *Q.* x *bushii* in correspondence in May 1962, when he offered to send scions to Sir Harold who, always eager to acquire a new plant, reminded him in August 1962. In September 1962, Mulligan sent six scions of *Q.* x *bushii* to Sir Harold. They were grafted onto four different stocks—two on *Q. rubra*, one on *Q. cerris*, one on *Q. nigra* and two on *Q. robur*. Records at the Sir Harold Hillier Gardens and Arboretum show that two trees were planted in the collection in January 1969.

Clearly, as the Washington Park Arboretum trees had been raised from seed, there was the distinct possibility that another species was involved, but in 1987, Mulligan confirmed through a study of his own that the Arboretum's trees were hybrids between *Q. velutina* and *Q. marilandica*, as the foliage clearly showed intermediate characteristics. Unfortunately, all three trees at the Arboretum have since died. The first was removed in 1953; the second was probably lost following snow damage in 1965-66; and the last tree was removed in 1993.

Quercus x *bushii* 'Seattle Trident'

One tree from the Washington Park material remains in the Sir Harold Hillier Gardens and Arboretum and has made a particularly fine specimen (accession number 1977.0538S). In November 2002, it was over 34 feet tall and of almost equal spread with a trunk diameter of 9.8 inches. In its three-lobed leaves, closest to *Q. marilandica*, it appears distinct from the

Coming Home!

A COLLECTIONS CONSERVATION SUCCESS STORY

By David Zuckerman

David Zuckerman, planting and watering the new *Quercus* x *bushii* 'Seattle Trident' "babies," October 2002.

If trees could talk, "Home, sweet home!" is what the three newly planted *Quercus* x *bushii* 'Seattle Trident' oaks would be saying. It's been close to ten years since Washington Park Arboretum had a specimen of the oak hybrid, *Quercus* x *bushii*, in its collection. The last of three 1937 accessions was removed in 1993 due to hazard potential and poor health. It had grown to a height of 30 feet, with a 20-foot spread and 16-inch diameter trunk. It was growing in map grid 38-1W where one of its parents, *Q. marilandica*, the black jack oak, still resides. The three-lobed or trident leaf of *Q.* x *bushii* is inherited from the black jack oak.

In the spring of 1998, Allen Coombes, Botanist at the Sir Harold Hillier Gardens and Arboretum in England, asked Randall Hitchin, the Arboretum's Collections Manager, if we would like scionwood of their recently developed cultivar of *Q.* x *bushii*, 'Seattle Trident.' Since the Arboretum is the place of origin of this unique plant—as explained by Coombes in this issue of the Bulletin, the answer was, obviously, a resounding yes!

In the fall of 1998, it was requested that scionwood be sent from Hillier's to Carlton Plants, Inc., in Oregon. There, the scionwood was grafted onto *Quercus palustris* rootstock. In January 2001, five successfully grafted plants were delivered to the Arboretum. During the summer and fall of 2002, a planting site for three of the five oaks was located and prepared. I am pleased to say, they were planted on October 25, 2002, and can be found in the oak collection, grids 42-1W and 42-BL.

The second parent of the hybrid *Q.* x *bushii*, *Q. velutina*, or black oak, is growing nearby in 42-1W. It will keep an "eye" on our new "babies" and make sure they develop into the handsome trees they truly are! Ah, at long last, "Home, sweet home." ~

David Zuckerman is the University of Washington Horticultural Staff Supervisor at the Arboretum. He has been a part of the horticultural staff for over 20 years.

ILLUSTRATION BY SUE OLDFIELD

most commonly cultivated form of this hybrid and from other forms seen, both in herbaria and gardens, which usually have five-lobed leaves similar to *Q. velutina*. It was noted as a particularly outstanding form by members of the International Oak Society during a tour of the extensive collection of oaks at the Sir Harold Hillier Gardens and Arboretum in October 1995. It was first described by Hillier and Coombes (2002).

Description

Deciduous tree, of spreading habit, ultimate height uncertain but probably at least 15 m. Bark dark brown and furrowed. Shoots green and tomentose when young becoming brown and almost glabrous with age. Terminal bud 6-14 mm long and covered with grey hairs. Leaves emerging in early May with a dense, red, velvety tomentum, turning white then green; leaves and petioles densely tomentose when young becoming sparsely so with age. Mature leaves broadly obovate, to about 21 cm long by 19 cm across, prominently 3-lobed at the apex, central lobe the largest, to 6 cm long tapered from the base, lamina tapered from above the middle to a cuneate or rounded, often oblique base, glossy dark green above, paler and glossy beneath with a sparse tomentum; midrib pale green and prominent from the base to just below the centre of the leaf where it divides into three smaller veins, each of the lateral veins dividing into two. Leaves glossy on both sides, dark green above and pale green below.

The cultivar epithet chosen refers both to its place of origin, Seattle, and the main characteristic gained from *Q. marilandica*, that is, the three prominent leaf lobes giving many of the leaves a trident-like appearance.

Given a good, neutral to acidic soil and a position in full sun it should be possible to grow *Quercus* x *bushii* 'Seattle Trident' in many gardens. The ornamental features of *Q.* x *bushii* 'Seattle Trident' make it a highly attractive medium-sized foliage tree suitable for large gardens and parks. It is also of considerable historical interest in that it may derive from the original collection by B.F. Bush.

SALLY SCOTT is Market Garden Manager at H.M. Prison Leyhill, Gloucestershire. She undertook the work on *Q.* x *bushii* when she was a student at Sir Harold Hillier Gardens and Arboretum in 1997-98.

ALLEN J. COOMBES is Botanist at the Sir Harold Hillier Gardens and Arboretum where his special interest is *Quercus* (oaks) as well as the taxonomy and nomenclature of woody plants. He has written numerous articles and books including "Trees" (Dorling Kindersley, 1992), "The Gardener's Guide to Shrubs" (Mitchell Beazley, 1998) and "Trees for Small Gardens" (Dorling Kindersley, 2000).

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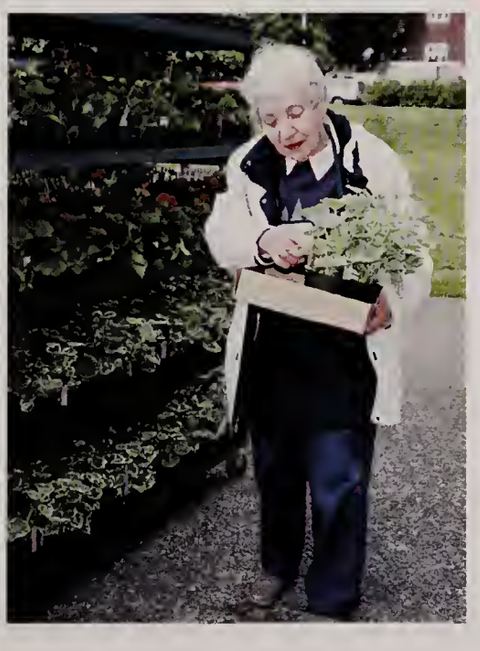
ABOVE: The autumn bloom of *Franklinia alatamaha*, originally a native of the southeastern United States and now extinct in the wild. Seed of this species was collected by John Bartram, America's first botanist, at the end of the 18th century and named by him for his friend Benjamin Franklin.
BELOW: Jeannine Curry examining plants purchased for a recent Arboretum plant sale.

Bless St. Fiacre!

By Jeannine Curry

I had heard that St. Fiacre was the patron saint of gardeners, and I relentlessly bent his ear when I became the gardenmaster of a neglected but picturesque half-acre with three distinct rock gardens, a fish pond and two waterfalls. I had never gardened intensely before, but I could visualize a spot of beauty. With confidence, I can say that I brought the place back to its original splendor in 30 years, all the while honing my almost nonexistent gardening skills and, bit by bit, increasing my botanical knowledge.



It was a bit traumatic to pass the property on to strangers when I sold my home 10 years ago, only to become the owner of a slightly-larger-than-a-city-lot garden, also quite neglected, and, amazingly, with five sizeable evergreens. These had to go. I need color to confront the day, and I planned to choose my plants with that in mind.

The First Choice

My first stop: the Pat Calvert Greenhouse, where I found a cutting labeled, "*Franklinia alatamaha*." I had always admired one

particular spunky specimen of this tree in the Arboretum—artfully propped up following the loss of some large limbs. It starts blooming in August, when other trees are through, and its leaves gradually turn brilliant red while it is in bloom. My small purchase has been growing quite well in my garden. It is almost five feet tall, but it persists in being evergreen—and the new growth has a tinge of red. Oh no, in the name of St. Fiacre, not a photinia! But an arborist who was pruning some of my shrubs told me it was a "*Gordonia.*" And reference books say that one gordonia is actually *Franklinia alatamaha*. So I will watch it closely and hope it becomes less evergreen and more like the Arboretum's fine franklinia in years to come.

Special Plants for Small Gardens

As an Arboretum tour guide, I remembered admiring a unique witch hazel relative, *Disanthus cercidifolius*, because its fall color was outstanding. When I found one, I felt very fortunate, for cuttings of this plant rarely survive. At about the same time, I purchased a *Loropetalum chinense* 'Burgundy' (syn. *L. chinense* f. *rubrum*). I could not find a picture of this plant anywhere, but it seemed unusual, and its small leaves were reputedly ever-red, a rich, warm color.

Both the disanthus and the loropetalum were happy and grew tall and handsome. Indeed, the latter reached three feet and had a profusion of witch hazel-like, shocking pink flowers. I brought branches to the greenhouse and produced 20 rooted cuttings that sold rapidly. I was feeling a bit smug as the grower of some hitherto rather rare plants, but St. Fiacre must have noticed my pride, for, with little thought, I hired a money-starved student to do some weeding and pruning of several large shrubs.

I let the young lady do her work, which she claimed to have done before, but by the end of the day, the loropetalum had been

reduced to six inches, while the disanthus had been uprooted completely because "it did not look like such a good plant." Sadly, I have not been able to locate replacements for my two favorite plants. The loropetalum has become so popular as to be sold out at the only nursery source I could find; and, so far, I have not found a grower for the disanthus.

My Own Rarity

I have had to content myself with creating an entirely new plant "genus" instead. Last year, an acanthus I planted as a "conversation piece" grew too large, and I had it pulled out, planting a hosta in its place. This year, I have something unique. The acanthus, having proved itself more difficult to eradicate than I realized, now forms a frame of ruffle around the hosta. They both bloom at the same time, and I boast of having the first *Hoscanthus*. Bless St. Fiacre. One can never be too sure what one's patron saint can accomplish!

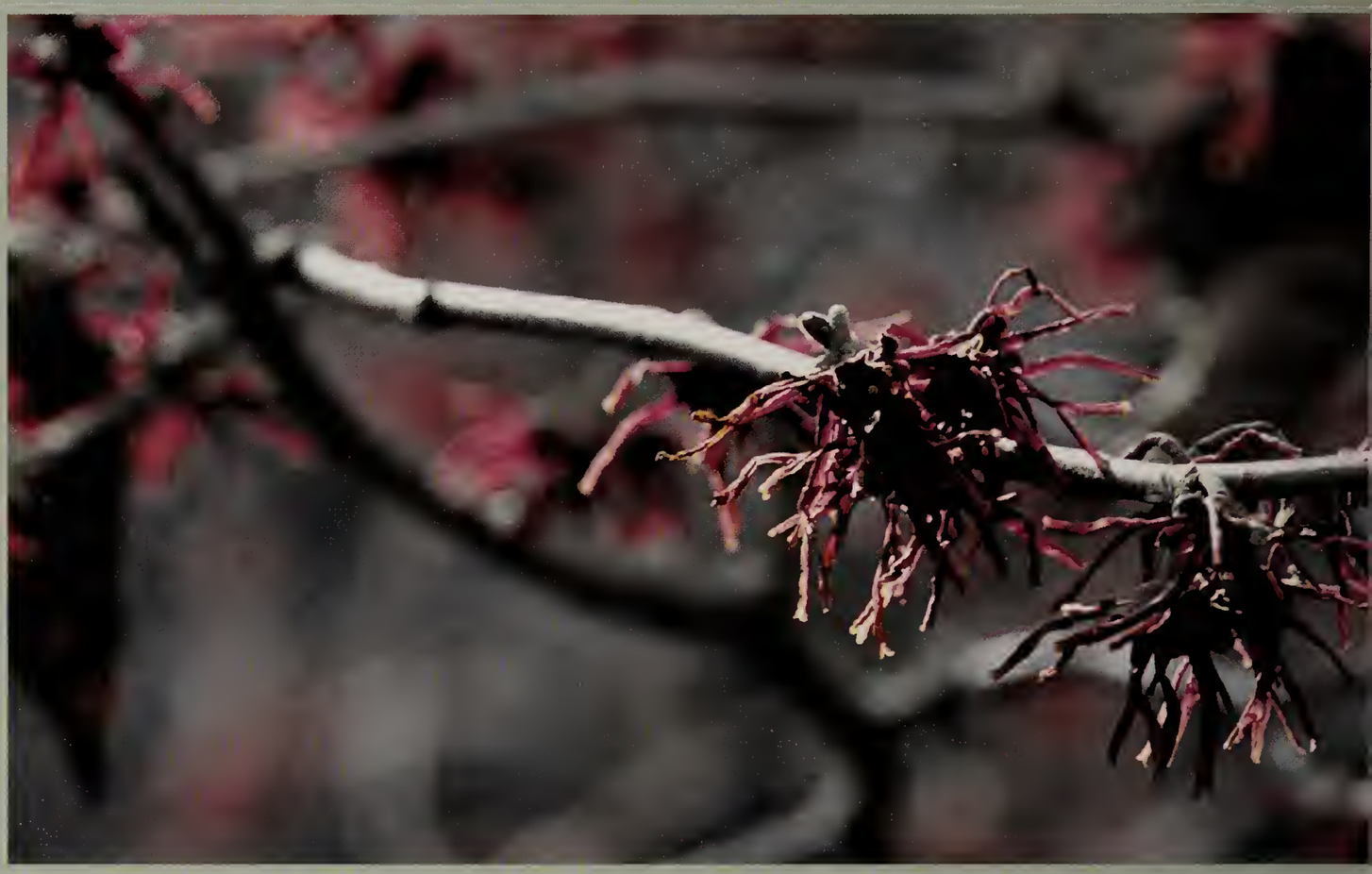
JEANNINE CURRY loved Washington Park Arboretum, perhaps as much as her own gardens.

At the time of her death in October 2002, Jeannine had been an Arboretum volunteer for more than 30 years. Her fondest Arboretum memories, it seems, involved plant sales, for which she shared wholesale plant purchasing responsibilities with other Arboretum volunteers.

A proud member of Arboretum Foundation Unit 39, Mme. Curry also served as a member of the Foundation Board of Directors and its executive and finance committees. She was a valued member of the Bulletin's editorial board, submitting this article "Bless St. Fiacre!" two weeks before her death.

As a Graham Visitors Center lobby volunteer, Jeannine welcomed countless Arboretum visitors over the years. Her friendly face, French charm and endless Arboretum anecdotes are missed by many.

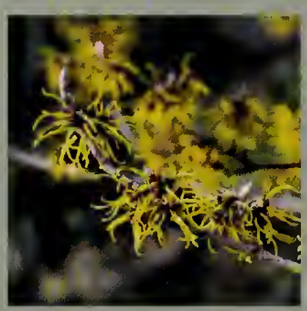
RICHARD HARTLAGE



HEAVENLY HA

BY RICHARD HARTLAGE

GREAT PLANT PICKS (GPP) is now nearly three years old. Seventy-nine plants have been chosen over the last two years, and over eighty will receive awards in 2003. Is that too many? No, because the goal of the program is to create a comprehensive list of plants that perform well in the Northwest—a list from which designers, educators and gardeners of all means can assemble groups of plants to use in a variety of situations.



RICHARD HARTLAGE

ABOVE: A graceful twig of the small, shredded blooms of *Hamamelis vernalis*.

RIGHT: *Hamamelis* x *intermedia* 'All Gold.'

MAMELIS

JOY SPURR

ABOVE: The blossoms of *Hamamelis* x *intermedia* 'Diane.'

RIGHT: The fall color of *Hamamelis* x *intermedia* 'Ruby Glow.'

The GPP Web site (www.greatplantpicks.org) contains fact sheets on individual plants, retail and wholesale sources, and a photo library of all selections. The most recent Great Plant Picks were on display at the Northwest Flower & Garden Show the last two years and will be there again at the 2003 show. Information about the new selections can be picked up at the display, and posters will be for sale for the first time.

To date, most plants—individual selections from a variety of genera—have been chosen by judges at quarterly round-table discussions, but the ultimate goal is to select plants by evaluating comprehensive collections in the field. This is the only unbiased and most thorough way to choose the best plants for

RICHARD HARTLAGE

Northwest gardens and landscapes.

First Comprehensive Genus Evaluation

Our first such collection evaluation was of witch hazels (*Hamamelis*). Five judges met at Gossler Farms in Springfield, Oregon, in January 2001, to evaluate Roger Gossler's collection of specimen *Hamamelis*. Witch hazels are disease-resistant, adaptable to a wide variety of growing conditions and soil types, have pleasing growth habit, superb autumn color on the whole, and, of course, usually bloom in winter. But their flowers vary widely. The panel of judges was interested in looking primarily at the flower production of various species and cultivars: color, quantity of bloom, blossom size and fragrance were of major interest.

RICHARD HARTLAGE

Hamamelis x *intermedia* 'Jelena' brightens the winter landscape with a multitude of orange flowers.

First, a little background on the genus. There are two *Hamamelis* species native to North America. *Hamamelis vernalis* is the one most commonly seen in nurseries and has small, reddish to yellow flowers in January and and February. The second native witch hazel is *H. virginiana*. Widely ranging from Canada to Georgia and west to Nebraska and Arkansas, this species is the most common native American *Hamamelis*, and it has the distinction of flowering in October rather than winter, which is typical of the genus. The southern witch hazel, formerly known as *H. macrophylla*, is not "macrophylla" (large-leafed) at all, but is a geographic ecotype of *H. vernalis*, one third smaller in all parts, and is a collector's plant only, virtually unknown in cultivation.

There are two Asian species: *Hamamelis mollis*, native to China, and *H. japonica*, native to Japan. In gardens, these two species have been intentionally and unintentionally crossed to create *Hamamelis* x *intermedia*. The Asian species have larger flowers than the American species and are showier in the garden; the Chinese witch hazel, *H. mollis*, is considerably more attractive than *H. japonica*. It has large, canary-yellow flowers, is the most fragrant of all the plants evaluated, and is, in fact, one of five witch hazels selected as Great Plant Picks.

Selected Cultivars

A second choice witch hazel is *Hamamelis* 'Pallida.' There seems to be some debate about whether to classify 'Pallida' as *H. mollis* or *H.* x *intermedia*. Most horticultural taxonomists place it among the latter, and that is how the Royal Horticulture Society designates it in the "Dictionary of Gardening," our standard taxonomic reference, so that is the designation we are using. *Hamamelis* x *intermedia* 'Pallida' is pale yellow and tends to have pronounced horizontal growth habit.

Three more witch hazels selected as Great Plant Picks represent the breadth of flower color available in the genus. *Hamamelis* x *intermedia* 'Jelena' is copper orange and has the best autumn foliage of the lot. It was selected at Kalmthout Arboretum in Belgium and has been a hit with gardeners since its introduction. *Hamamelis* x *intermedia* 'Diane,' another Kalmthout selection, is darker burgundy than 'Ruby Glow' and with superior fall color. The final selection, *H.* x *intermedia* 'Winter Beauty,' made at the Hokaneya Nursery in Yokohama, Japan, has the largest individual flowers, produced in great profusion. Golden filaments, heavily stained red at the base, give the overall appearance of orange flowers. 'Winter Beauty' is very similar to 'Orange Beauty' but has larger flowers.

A plant not awarded GPP status because Gossler Farms did not have a mature specimen is *Hamamelis* x *intermedia* 'Arnold Promise,' selected at the Arnold Arboretum in Jamaica Plain, Massachusetts. It is a bright, clear yellow, between the golden yellow of *H. mollis* and the pale yellow of 'Pallida.' 'Arnold Promise' has the added distinction of flowering profusely from an early age. The committee will look at sizable plants in the Seattle area this winter to decide whether it, too, is worthy of being designated a Great Plant Pick.

More Good Choices

Seventeen witch hazels were evaluated and many favorites, perhaps even yours, may not have been chosen a Great Plant Pick. For instance, I am fond of *Hamamelis* x *intermedia* 'Ruby Glow.' It is one of the dark-flowered selections and grows stiffly upright, rather than spreading, so it makes a superb small tree that will grow large enough to walk under. The flowers are not nearly as dark as 'Diane,' the cultivar selected as a Great Plant Pick. *Hamamelis* x *intermedia* 'Primavera' is another of my personal favorites. It is a prolific bloomer, consistent from year to year, with canary-yellow flowers, but it has sparse fragrance and is not as prolific as 'Pallida' or the golden yellow 'Winter Beauty.' And if you are truly interested in botanical oddities, *H. vernalis* with burgundy flowers sounds interesting, but the size of the flowers is small, only a third the size of 'Diane.'

I expected newer cultivars from Europe to be superior to older cultivars, but only by seeing all the plants together can real comparisons be made. Relying on memory is not enough; personal bias weighs too heavily. 'Westerstede,' another of the pale yellow flowering forms, is a newer selection. But newer doesn't mean better. It blooms only modestly. There are many witch hazels to choose from—many personal "favorites," but the ones designated Great Plant Picks are the best performers in similar growing conditions, evaluated in a side-by-side trial.

On the whole, all *Hamamelis* x *intermedia* make excellent garden plants that will not disappoint. If you are a collector, there are other botanical oddities to choose from, should you have enough space for them in your garden. If you would like to visit other regional collections of witch hazels, please see the extensive collection in the Joseph A. Witt Winter Garden at the Arboretum and at VanDusen Botanical Gardens in Vancouver, British Columbia.

Further GPP Initiatives

All plants evaluated, with notes and pictures of each, may be seen at our Web site, www.greatplantpicks.org. Great Plant Picks has also posted on the site preliminary results from other comprehensive genus evaluations. Two of the most interesting genera studied are *Mahonia* and *Pieris*, and information from another dozen genera is also available. A reference book of Great Plant Picks is planned for publication in early 2004. We are also beginning trial plantings of *Berberis thunbergii* cultivars and *Astrantia* species and cultivars with Thurston County Master Gardeners. The barberry trial will last five years and the astrantia trial, three years. We have ongoing trials at the Miller Botanical Garden of *Colchicum, Molinia, Brunnera* and *Corydalis*, and we plan to organize further group evaluations, such as *Sambucus, Kniphofia,* and *Phlox*. In the meantime, if you would like more information, check our Web site or call the office at 425-788-4307. ~

RICHARD HARTLAGE is the Director/Curator of the Elisabeth C. Miller Botanical Garden, which administers the Great Plant Picks program. For information on the founding of Great Plant Picks see the Spring 2001 Bulletin, Volume 63, Issue 1.

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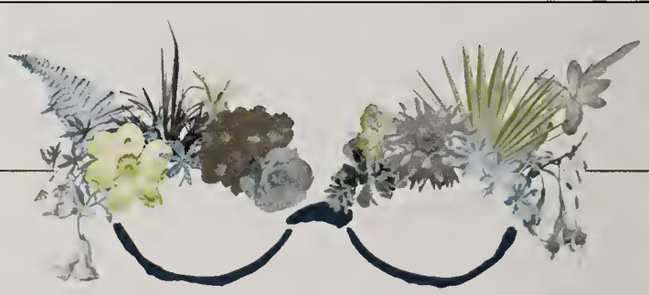

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THE BEGINNINGS:

Pineta in Great Britain and the United States

BY LIZ BIRKHOLZ

Visualize an English landscape composed only of stumps and shrubs. As England's 17th century monarchs expanded the British Empire, its laborers felled vast stretches of timber to build naval vessels and buildings. The few trees that remained were deciduous, contributing to dull, winter hillsides. Such was the scene in 1664 when, in "Sylva," John Evelyn pled for people to replant trees. Thirty years later, a pair of Scottish families, the Veitches and Naesmyths, appeared to have an ingenious approach to reforesting the land: They planted exotic trees from North America and other parts of Europe.

In the early 18th century, Linnæus included conifers as part of his plant classification system published in "Genera planatarum" (1737) and "Species planatarum" (1753). Linnæus established some twenty-five genera of Coniferæ. People welcomed his texts both as taxonomic authorities and as definitive guides for addressing forest renewal, improving winter scenery, and informing plant collectors. These publications arrived at a perfect time,

The cones of the Western white pine (*Pinus monticola*), a highly desirable member of English pineta after seed arrived in London in 1827.

for the English had tired of their fussy baroque gardens and were embracing a new style of landscape design. Inspired by landscape paintings by Poussin and Lorrain, they looked for ways to achieve an *idealized* natural scene. Armed with Linnæus' insights, they sought species to accentuate their Arcadian scenes.

The Eastern white pine (*Pinus strobus*) was one of their first darlings. It gained popularity at First Viscount Weymouth's collection at Longleat in Wiltshire, so much so that it became known as the Weymouth pine. The Duchess of Beaufort planted it at Badminton in Gloucestershire in 1705, and it was introduced to Scotland at Dunkeld. Dunkeld's larches (*Larix* species) also impressed landowners. Dawyck in Scotland had larches and another star, the balsam fir (*Abies balsamea*), grown from seed from the English Colonies in 1743. Landowners liked fir trees too. Sir William Baker planted many firs at Bayfordbury, near Hertford. The most bizarre starlet to try out for a role in the new *idealized* natural scene was the monkey puzzle tree (*Araucaria araucana*), native to Chile and introduced to England in 1795.

Pinus sylvestris

19th Century Discoveries

By the early 19th century, Great Britain was in dire straits despite these promising initiatives. After all, it had lost a significant chunk of its natural resources to Gen. George Washington. To find new species for British soils, David Douglas was twice sent by the Horticultural Society of London to explore the Pacific Northwest. He provided Europeans with seed of 17 West Coast conifers, including noble fir (*Abies procera*), grand fir (*A. grandis*), Pacific silver fir (*A. amabilis*), Douglas fir (*Pseudotsuga menziesii*), Sitka spruce (*Picea sitchensis*), ponderosa pine (*Pinus ponderosa*), and Western white pine (*P. monticola*). His first discoveries from North America arrived in London with great fanfare in 1827. The Horticultural Society sent seeds to subscribers who had large estates on which to plant them and distributed plants raised from Douglas' seeds to its Society fellows. Douglas' discoveries found their way to Scone Palace, Drumlanrig and Dawyck Gardens in Scotland; and Dropmore, Kew and White Knights in England.

Collectors were delighted with these new, exotic conifers and with David Douglas. Authors and illustrators feverishly incorporated Douglas' discoveries of Pacific Northwest conifers into their texts. English landscape architects counted Douglas' finds as "more numerous than those introduced by any other individual whatever." His discoveries inspired a flurry of publications of the 1830s and '40s that rearranged conifers' order in taxonomists' minds. Aylmer Bourke Lambert, who had published the first volume of his important

Larix Europoea

work "Genus Pinus" in 1803, had classified conifers the way Linnæus had. By the time of his 1832 octavo edition, Lambert had incorporated Douglas' discoveries.

In the 19th century, all conifers were thought to be pines. When people referred to a *pinetum*, they referred to a piece of land where a landowner grew and displayed every kind of conifer he could acquire, rather than only the pines of today's genus Pinus. Linnæus' system was considered authoritative until well after the first pineta appeared in Great Britain. Even as 19th century taxonomists reconsidered what a pine was and decided how to include David Douglas' discoveries, conifer collectors referred to their collections as pineta. Collectors weren't inclined to rid themselves of portions of their collections just to continue to label their conifer gardens as *pineta*. Instead, *pineta* continued to refer to broad collections of conifers.

Pineta Perfected

John Claudius Loudon was an authority on pineta. His *gardenesque* style within the English landscape movement explicitly reserved room for individual trees to reach their full potential. He persuaded his clients that their estates would not be considered idealized works of art if others mistakenly thought of them as made by nature, and he therefore encouraged them to plant exotic, as well as indigenous, trees and shrubs.

Though the size of pineta varied widely, for private landowners pineta connoted wealth and status. Landowners needed wealth to afford full pineta, given the acreage that the gardenesque style called for. Still, pineta started to appear throughout England. The Duke of Bedford already had a great evergreen plantation at Woburn Abbey, begun in 1743, but he decided to put a pinetum next to it. The Duke's gardener, James Forbes, wrote "Pinetum Woburnense" (1839) to commemorate the Duke's collection. Forbes particularly praised Douglas' work and his introduced North American species. Douglas' explorations stimulated new pineta "throughout the kingdom, where the family of Coniferæ plants has now become a favourite tribe for cultivation."

"Pinetum Woburnense" was the first book to name our Pacific silver fir, and it reflected the wide range of conifers that collectors included in their pineta. It described and illustrated *Abies, Agathis, Araucaria, Cedrus, Cunninghamia, Cupressus, Dacrydium, Dammara* (now included in *Agathis*), *Juniperus, Larix, Podocarpus, Taxodium, Taxus,* and *Thuja*. By the mid-19th century, a remarkable number of pineta were created. Among them were pineta at Belsay Castle, Howick Hall, and Craigside House in Northumberland; Chatsworth in Derbyshire; Carclew in Cornwall; Bowood and Wardour Castle in Wiltshire; Bicton in Devon; Flitwick House at Bedfordshire; White Knights at Berkshire; and Cheshunt at

Hertfordshire. Dropmore near Windsor had the oldest collection, and Loudon considered Elvaston Castle's collection in Derbyshire to be the best.

In the last half of the 19th century, landowners expanded the range of their holdings and shared what they knew. George Gordon acknowledged recent updates to conifer taxonomy, yet named his 1858 book of conifers "The Pinetum" anyway. He saw "The Pinetum" as a compendium of "cone-bearing trees." It reflected continued interest in North American conifers and pointed out the pine barrens of Georgia and gigantic specimens in California and on the Northwest coast. Edward Ravencroft's "Pinetum Britannicum" (1884) was another influential text with a scale to match its subject matter. It consisted of 22" x 16" bound pages with beautiful plates, and included a price list from the Lawson Seed Nursery. Various dukes, marquis, earls, lords, ladies, and libraries across Europe subscribed to its three volumes. The Royal Horticultural Society held its first conifer conference in 1891. Attendees were profoundly satisfied with trees introduced from the Pacific coast, especially Lawson's cypress (*Chamaecyparis lawsoniana*).

Pineta in the New World

Trends in Great Britain took several decades to make their way across the Atlantic to the United States. However, the Lewis and Clark expedition seemed to give pineta in the United States a head start. In 1806, Lewis and Clark came across several conifers Douglas had found, as well as the subalpine fir (*Abies lasiocarpa*), western juniper (*Juniperus occidentalis*), Engelmann spruce (*Picea engelmannii*), white-bark pine (*Pinus albicaulis*), western larch (*Larix occidentalis*), Pacific yew (*Taxus brevifolia*), and western hemlock (*Tsuga heterophylla*).

Landowners in the United States started to develop their own naturalistic landscapes

Cedrus Libani

using the indigenous flora as well as introductions from Europe and elsewhere. There to guide them was the American landscape architect, Andrew Jackson Downing. Familiar with Repton's and Loudon's views, Downing interpreted their ideas to accommodate the climate and flora of the Eastern states. It was Downing who would sell Americans on pineta. In his "Treatise on the Theory and Practice of Landscape Gardening, adapted to North America; with a view to the Improvement of Country Residences" (1853), Downing emphasized Loudon's gardenesque approach. "In fine country residences abroad," he persuaded,

> *it is becoming customary to select some extensive and suitable locality, where all the species of Pines and Firs are collected together, and allowed to develope themselves in their full beauty of proportion. Such a spot is called a Pinetum; and the effect of all the different species growing in the same assemblage, and contrasting their various forms, heights, and peculiarities, cannot but be strikingly elegant.*

Downing considered pineta areas of interest to set apart from a house, and he felt

more delicate species could be protected if planted under more vigorous ones. Downing particularly admired the Dropmore estate near Windsor. He was amazed by its sacred cedar of India (*Cupressus lusitanica*), mourning cypress (*Cupressus funebris,* or *Chamaecyparis funebris* according to some authorities), and Himalayan white pine (*Pinus wallichiana*) specimens. He called the monkey puzzle its "heroic gem" and appreciated its Douglas fir most of all.

In the second half of the 19th century, private landowners in Massachusetts, New York and Pennsylvania initiated the first pineta in the United States. The earliest appeared in New York when Henry Winthrop Sargent began a pinetum at his Wodeneth estate in Dutchess County, an estate he established in 1855. In 1860, Horatio Hollis Hunnewell established a pinetum at his arboretum in Wellesley, Massachusetts. Hunnewell was inspired by topiary he had seen at Elvaston Castle in Derbyshire. Many of his own conifers were clipped or sheared in ways similar to Elvaston's. Downing admired Hunnewell's pinetum and wrote about it in his "Treatise."

In 1872, Charles Anderson Dana, the publisher and editor of the New York Sun established a pinetum on Dosoris Island at Glen Cove, Long Island. In 1886, the Arnold Arboretum began a pinetum at Jamaica Plain, Massachusetts. Later on, labor crews moved specimens from a supplementary pinetum to "the Pinetum proper." The Ellwanger and Barry Nursery Firm donated Frederick Law Olmsted-designed land that included a pinetum to the city of Rochester, New York, in 1888.

Coming Home

Through the 1900s, pineta continued to appear, grow, and even disappear across Great Britain and the United States. In 1937, the first trees planted at the Washington Park Arboretum were in its Pinetum. Washington Park Arboretum currently has approximately 235 kinds of conifers, by Registrar and Collections Manager Randall Hitchin's count. His tally is more than double that found at Dropmore in the 1850s and doesn't even include the Arboretum's dwarf conifer collection (planted in 1967), the Conifer Meadow (planted in 1981-82), or the rest of the Arboretum grounds. It is sweet irony that the Pacific Northwest was the source of many of the conifers that made it all the way to Great Britain's pineta in the 19th century, yet eventually came all the way back to a Pinetum in the Pacific Northwest. ~

Liz Birkholz is studying toward a master's degree in landscape architecture at the University of Washington. She also serves on the board of the Kruckeberg Botanic Garden Foundation.

Illustrations for this article come from "A History of British Forest—Trees, Indigenous and Introduced" by John Prideaux Selby, published in London by John van Voorst, Paternoster Row, 1842.

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A Celebration: Reflecting the Olmsted Tradition

Text and Illustration by Phil Wood

Imagine celebrating the 100th anniversary of the famed Olmsted brothers' landscape architecture firm's Seattle design work by strolling with similar enthusiasts through a brand new garden. Imagine that the garden overlooks the city with a view of Elliot Bay and features a reflecting pool, a lamp-lined boulevard and early spring bloom. Now imagine yourself at the 2003 Northwest Flower & Garden Show, and you will find yourself in the display garden sponsored by the Washington Park Arboretum and Seattle Parks and Recreation.

The garden, entitled 'Reflecting the Olmsted Tradition,' will fill the convention center skybridge. The central garden will feature a lawn, bordered with trees and shrubs, leading to a pool 20 feet in diameter, partially surrounded by a stone path. The plants featured will be selected with an eye to what the Olmsteds used in their designs, including Northwest natives. A viewpoint in the garden will capture the spectacular scene down Pike Street to the water. Adjacent to the viewpoint, planter boxes filled with trees and light posts will create seating areas furnished with period benches. Along the eastern window wall, trees will create a tall background screen.

The Olmsted brothers' firm grew out of the firm founded by Frederic Law Olmsted Sr., the founder of landscape architecture and a designer of Central Park in New York. Olmsted Sr. retired in 1895, and the firm re-formed as Olmsted Brothers in 1898. In 1903 the firm began its work in the Pacific Northwest, preparing plans in both Portland and Seattle. The Olmsted legacy in Seattle includes the boulevard system (including Lake Washington Boulevard), 37 parks and playgrounds, the grounds of the 1904 University of Washington campus, the 1909 Alaska-Yukon-Pacific Exposition, and many other public and private landscapes. Today, Seattle has one of the largest, best preserved Olmsted park systems in the country, and we have many reasons to celebrate its centennial.

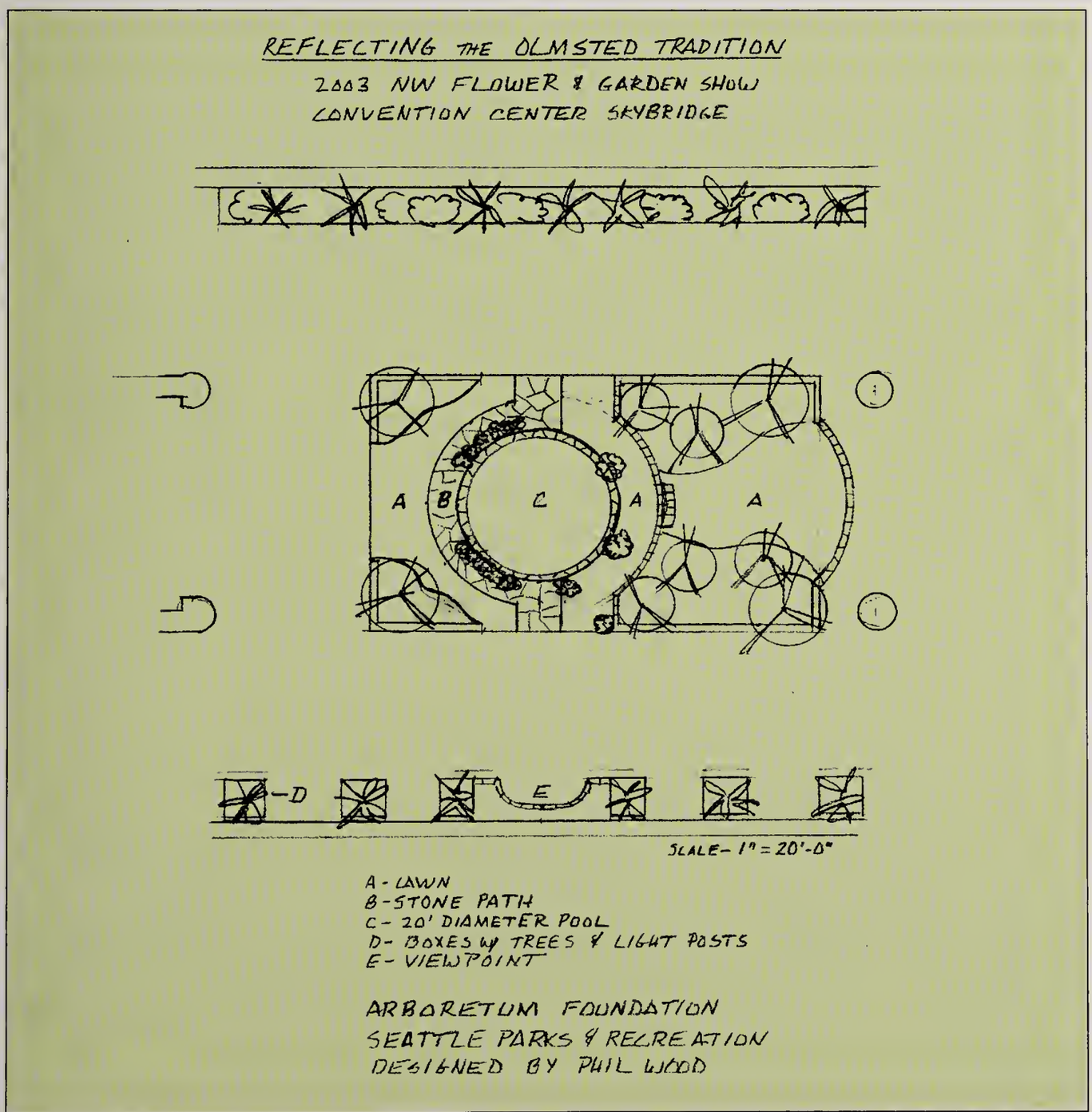
The Olmsteds were ahead of their time, and many of their design ideas remain current today. Parks and gardens creating a strong link between urban life and the natural world are treasured assets that, in our high-stress, fast-paced world, are experiencing renewed interest and appreciation today. The Olmsteds combined classical formality with naturalistic planting, another design trend popular today. (Penelope Hobhouse, one of English horticulture's grande dames, advocates combining structural formality and plants in profusion, which is restating the same concept in a different way.)

It takes a village to build a garden. We have a terrific planning team. Mike Allen is chair of the committee formed by the Arboretum Foundation to oversee the creation of the 2003 garden. Joining me as lead designer are Deborah Andrews, Executive Director of the Arboretum Foundation, Board member Bob Lilly, and volunteers Pat Crockett, Matt Holzknecht, Gordon Jonsen, James Tupper, Sharlene Welsh and Mark Wain. Joining the team from the University of Washington's Arboretum horticultural collections crew are David Zuckerman and Fred Hoyt. (Fred also is on the staff of the Center

for Urban Horticulture.) Duane Pentilla and Lisa Chen represent Seattle Parks and Recreation. This year marks the first time Seattle Parks and Recreation joins in as a full partner sponsoring a garden at the show. This joint effort makes possible the creation of this ambitious celebratory garden.

The planning team is joined by scores of volunteers who will assist in putting the garden together at the convention center. Installation dates this year are February 15 through 18 (yes, we have just three and a half days to build an entire garden). I always think of display garden setup as being the closest thing to joining the circus. This will be my tenth year actively involved in creating a garden, and every year I anticipate and enjoy the excitement of joining together with a closely knit group to put on a really great show.

PHIL WOOD is a former member of the Arboretum Foundation Board of Directors and a Seattle garden designer who earned his Bachelor of Landscape Architecture degree from the University of Washington. His work may be seen at www.philwoodgardens.com, and he may be reached at philwood@philwoodgardens.com.



Pruning Witch Hazels

By Cass Turnbull

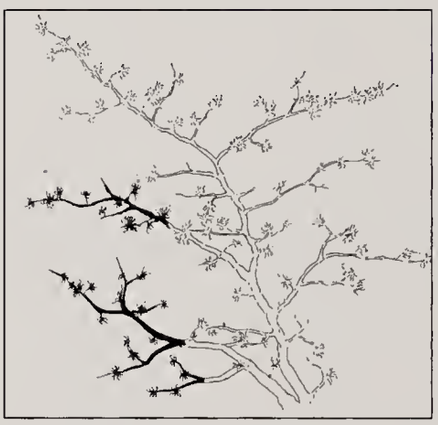
Illustrations by Kate Allen

Pruning witch hazels is an exercise in self-restraint. Attempting even moderate size control can ruin the plant's branch structure forever. Witch hazels create watersprouts at the drop of a hat, either from heading cuts or from too much thinning—and it doesn't take too much of either. *(See below.)*

As a result, correct placement of a new witch hazel is the key to proper pruning. And correct placement is rare. People tend to site a shrub prominently, close to the house or a walkway, or in front of a window where it will be framed while in winter bloom. But often this means the sad shrub is bordered by a path, staircase or sidewalk. And this leads to trouble when, inevitably, the witch hazel outgrows its allotted space. Although complete size restriction is invariably problematic, you may succeed in growing and pruning a witch hazel with one flat side against a wall. The rest of its growth may be redirected to better advantage. If necessary, to prevent a branch from poking a pedestrian in the eye, a few judiciously placed thinning cuts may successfully restore access to the path or sidewalk. *(See right.)*

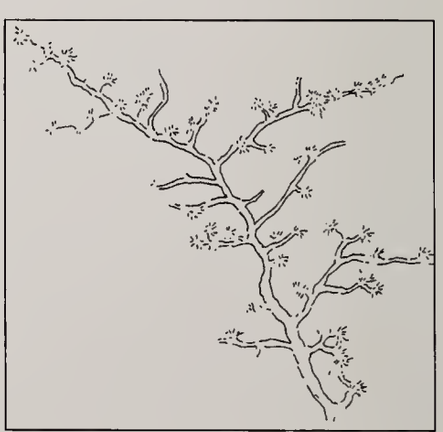
If you find yourself facing a witch hazel in need of pruning, stop and plan before you begin. Modest improvement can be made by pruning some (never all!) of the branches that interfere with the plant's naturally beautiful branch pattern. As always, first remove any dead wood (including stubs) and true suckers from below the graft union.

Then make a visual inventory of the "wrong" branches. Look for branches that cross and rub each other, ones that head the "wrong way" (back toward the center). Also locate ones that grow straight up or down from their parent stem, crossing into the next "layer" of



Heading to clear a path won't work, because it causes ugly watersprouts to grow.

Making a few, very few, judicious cuts may restore access to a path.



branches. If there are parallel branches growing close to each other, remove one, usually the lower one. More definition can be achieved by removing small twigs crowding close to branch crotches. But of all these "wrong" branches, you are allowed to remove only a few, lest you over-prune and stimulate watersprouts. *(See below.)*

If watersprouts grow next season, you have pruned too much. Do less, not more, in the future. Cut watersprouts quickly regrow and exponentially increase in number. The more you prune, the more they will return to haunt you. The only cure for these straight, rapidly growing, unsightly shoots is to avoid creating them in the first place. Or, if you are patient and let them grow for several years, the watersprouts may regain some of the pleasing form of the original branches. More often than not, however, it's not worth the wait, and removal of the entire mal-pruned plant is a better choice.

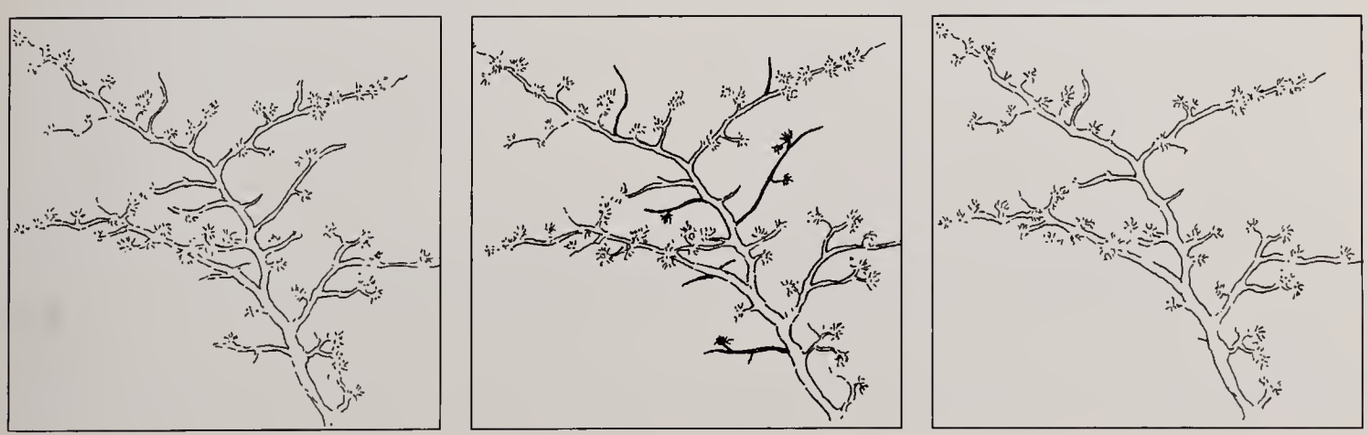
When in doubt, move on, working from the bottom up and the inside out in a roughly spiral fashion. Frequently step away from the shrub and look at it from different vantage points. Use a combination of smaller and larger thinning cuts, evenly spaced throughout. Try to remove less than one-tenth of the leaf area. Of 40 possible cuts, you should only make a dozen in the end. *(See bottom drawings.)*

As for timing, any time is acceptable. A clever gardener will choose to prune when the plant is in bloom—to use the shorn branches in a vase. ~

Cass Turnbill is the founder and spokesperson for PlantAmnesty. Her book on pruning will be published by Sasquatch Books in February 2004.

Don't over-thin witch hazels. It looks great right after pruning, but watch out. It sprouts back next year. Now you're stuck.

With general light thinning, no watersprouts will occur.



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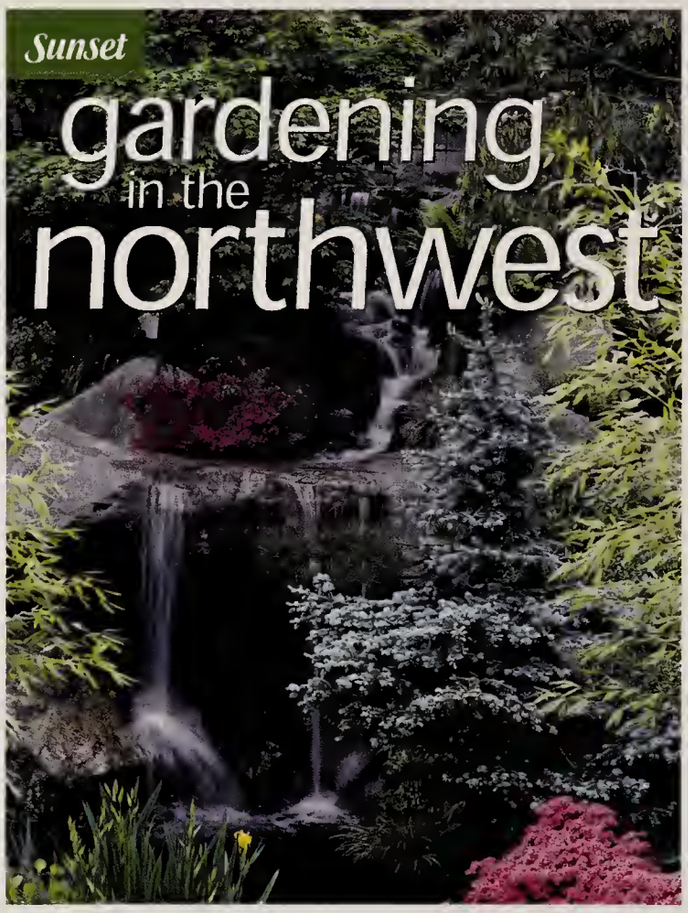

Gardening in the Northwest
Available January 2003
$19.95
192 pages

Gardeners from Oregon to British Columbia and beyond will applaud the arrival of this all-new, comprehensive regional guide. It celebrates the ideal growing conditions and diverse beauty of the Northwest as it delves into the particular climatic nuances that affect gardening here.

Gardening in the Northwest profiles dozens of innovative gardens, each one a stunning example of a particular style with a distinctly Northwest flair. Inspiring text is supported by handsome photography illustrating a variety of gardening environs, from beachside and houseboats to mountain rock gardens and country woodlands to—surprise! —lush rainforest retreats.

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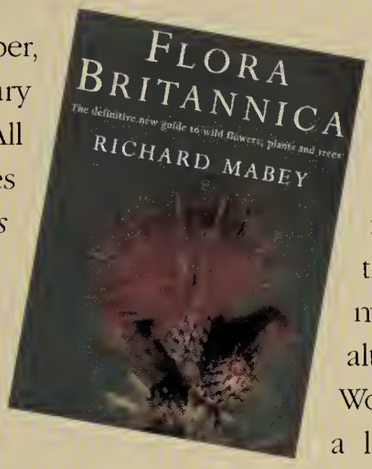
Yarn Spinning: A Book of "Totally Satisfying" Stories

BY BRIAN THOMPSON

Candlemas bells, Mary's taper, snow piercer, February fairmaids, dingle-dangle. All are quaint but surely bygone names for the common snowdrop (*Galanthus nivalis*). Planting a mountain ash (*Sorbus aucuparia*) to protect a new home while removing any nearby hawthorns (*Crataegus monogyna*). Relics from a more superstitious past, right?



Wrong. These traditions and thousands more still have their advocates in late 20th century Britain, as documented by "Flora Britannica" (London: Sinclair-Stevenson, 1996, ISBN: 1-85619-377-2), a far livelier tome than the dry, academic title suggests.

Described by author Richard Mabey as a cultural rather than botanical flora, "Flora Britannica" compiles the practices and customs associated with the native or naturalized plants of England, Scotland and Wales. Solicited over a four-year period in the early 1990s, the results of this survey paint a fascinating picture of a citizenry still very much in touch with the natural world around them.

Many of these associations will be familiar to Americans, while others will be new. The winged samaras of maples (*Acer* species) are called "helicopters" in England, just as they were in my childhood, but in Scotland are known as "backies" for their supposed resemblance to a small bat. Schoolchildren on both sides of the Atlantic know they're useful for model making, aviation sports and contests of balancing them on noses.

Adults will appreciate the ancient art of making heather ale in the Scottish Highlands and its recent revival by a home-brewer in Glasgow. Sadly, the mistletoe that is sold for Christmas is now mostly imported from France, although at Tenbury Wells market in Worcestershire shoppers can still buy a local crop from the Evans family farm grown on "...ancient fruit trees in their mixed orchards, above grazing sheep and free-range hens."

Spinning Tales

Mabey is a skilled storyteller, and much of the material weaving disparate accounts together is based on his own research. The engaging history of the Tenby daffodil (*Narcissus pseudonarcissus* ssp. *obvallaris*) illustrates this skill.

This small, solid gold trumpet daffodil was discovered as an apparent wild sub-species in southern Wales near the village of Tenby but was almost wiped out by over-collecting in the late 19th century. Fast forward to the 1970s when a young visitor asked for a source of the once famous daffodil at the local tourist office. No one on the staff had heard of the namesake flower, but not for long, as the director of tourism quickly jumped on this heaven-sent promotional tool. Writing in the 1990s, Mabey reports, "the area around Tenby is now awash with Tenby daffodils."

"Flora Britannica" is not just a series of anecdotes, but is organized by plant families

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